B.B.M.P

BRUHAT BENGALURU MAHANAGARA PALIKE

YELAHANKA ZONE

DIVISION: BYATARAYANAPURA

SUB DIVISION: KODIGEHALLI

Name of Work: Estimate for Improvements to Roads and Drains in Cross Roads of Bhadrappa Layout and Surrounding areas in Ward No. 12, (Kodigehalli).

Estimated Cost Rs. 75.00 Lakhs

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

NAME OF WORK:- Improvements to Roads and Drains in Cross Roads of Bhadrappa Layout and Surrounding areas in Ward No. 12, (Kodigehalli).

Estimation Cost.Rs 7500000.00

Sl No	Description of work	Unit	Mesurement				Qty.	Rate	Amount
			No.	L	B	D			
1	Earth work Excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. **(PWD SR 2021-22 Vol -I Pg No 5 item no 1.4.1)**	Cum							
	Desilting of Drain								
	6th Cross Balaji Layout Sham Charitable Clinic Road		2	115.00	0.60	0.60	82.80		
	Ganesha Temple Main Road, Badarappa Layout 2nd Cross, & Cross Roads		2	100.00	0.60	0.60	72.00		
	Chowdeshwari Layout 2nd Main		1	130.00	0.60	0.60	46.80		
	New RCC Drain								
	Sahaja Pride Apartment E/S Road 6th Cross Balaji Layout		2	135.00	1.10	1.00	297.00		
	Newton Public School N/S Road, Bhadrappa Layout		2	35.00	1.10	1.00	77.00		
	Newton Public School E/S Road, Bharadrappa Layout		2	80.00	1.10	1.00	176.00		
	Newton Public School Cross Road 2, Bhadrappa Layout		1	73.00	1.10	1.00	80.30		
	Vepaate Residency Road, Balaji Layout		1	36.00	1.10	1.00	39.60		
	Culverts								
			3	7.00	1.50	1.00	31.50		
	Basic rate	186.00							
	Area weightage 10%	18.60							
	Sub Total	204.60							
	Total						**903.00**	204.60	**184754.00**

Sl No	Description of work	Unit	Mesurement				Qty.	Rate	Amount
			No.	L	B	D			
2	Providing and laying in position Plain Cement Concrete Mix 1:3:6 (M10) for levelling course for all works in foundation. Using 40 mm nominal size graded crushed coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. **(PWD SR 2021-22 Vol -I Pg 15 item no 2.1.3)**	Cum							
	New RCC Drain								
	Sahaja Pride Apartment E/S Road 6th Cross Balaji Layout		2	135.00	1.00	0.15	40.50		
	Newton Public School N/S Road, Bhadrappa Layout		2	35.00	1.00	0.15	10.50		
	Newton Public School E/S Road, Bharadrappa Layout		2	80.00	1.00	0.15	24.00		
	Newton Public School Cross Road 2, Bhadrappa Layout		1	73.00	1.00	0.15	10.95		
	Vepaate Residency Road, Balaji Layout		1	36.00	1.00	0.15	5.40		
	Culvert								
			3	7.00	1.50	0.15	4.72		
	Issued Rate 07-07-2022 Basic rate	5554.00	✓						
	Area weightage 10%	555.40							
	Sub Total	6109.40					✓	✓	
	Total						**96.07**	6109.40	**586930.00**
3	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. M20 (The cost of steel reinforcement & formwork to be paid separately) **(PWD SR 2021-22 Vol -I Pg 17 item no 2.4.2))**	Cum							
	New Drain								
	Raft								

Sl No	Description of work	Unit	Mesurement				Qty.	Rate	Amount
			No.	L	B	D			
	Sahaja Pride Apartment E/S Road 6th Cross Balaji Layout		2	135.00	1.00	0.15	40.50		
	Newton Public School N/S Road, Bhadrappa Layout		2	35.00	1.00	0.15	10.50		
	Newton Public School E/S Road, Bharadrappa Layout		2	80.00	1.00	0.15	24.00		
	Newton Public School Cross Road 2, Bhadrappa Layout		1	73.00	1.00	0.15	10.95		
	Vepaate Residency Road, Balaji Layout		1	36.00	1.00	0.15	5.40		
	Side Wall								
	Sahaja Pride Apartment E/S Road 6th Cross Balaji Layout		2x2	135.00	0.15	0.60	48.60		
	Newton Public School N/S Road, Bhadrappa Layout		2x2	35.00	0.15	0.60	12.60		
	Newton Public School E/S Road, Bharadrappa Layout		2x2	80.00	0.15	0.60	28.80		
	Newton Public School Cross Road 2, Bhadrappa Layout		2	73.00	0.15	0.60	13.14		
	Vepaate Residency Road, Balaji Layout		2	36.00	0.15	0.60	6.48		
	Culvert								
	Raft								
			3	7.00	1.40	0.20	5.88		
	Side Wall								
			2x3	7.00	0.30	0.60	7.56		
	Issued Rate 07-07-2022 Basic rate	5968.00							
	Add 5% for Shuttering	298.40							
		6266.40							
	Area weightage 10%	626.64							
	Sub Total	**6893.04**							
	Total						**214.41**	6893.04	**1477937.00**
4	Supplying, Fitting and Placing un-coated TMT bar Reinforcement in sub-structure complete as per Drawing and Technical Specifications. MORTH Specification NO.1600&2200 **(PWD SR 2021-22 Vol - III P- 99 item no 13.1)**								
	For Drain	Cum					200.97		
		kg	Steel assumed 60 Kg/Cum of Concrete				0.06		
		tonne					**12.06**		
	For Culverts	Cum					13.44		
		kg	Steel assumed 80 Kg/Cum of Concrete				0.08		
		tonne					**1.08**		
	Issued Rate 07-07-2022 Basic rate	92170.00							
	Area weightage 10%	9217.00							
	Sub Total	**101387.00**							
	Total						**13.13**	101387.00	**1331556.00**

Sl No	Description of work	Unit	Mesurement				Qty.	Rate	Amount
			No.	L	B	D			
5	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite / trap / basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately **Mix 1:3:6 (M10) Using 20 mm nominal size graded crushed coarse aggregate (PWD SR 2021-22 Vol - I Pg 15 item no 2.1.4))**	Cum							
	Culvert Ramp								
			2x3	7.00	1.20	0.15	15.12		
	Coping Concrete								
	6th Cross Balaji Layout Sham Charitable Clinic Road		2x2	115.00	0.15	0.15	10.35		
	Ganesha Temple Main Road, Badarappa Layout 2nd Cross & Cross Roads		2x2	100.00	0.15	0.15	9.00		
	Chowdeshwari Layout 2nd Main		2	130.00	0.15	0.10	3.90		
	Issued Rate 07-07-2022 Basic rate	5728.00							
	Area weightage 10%	572.80							
	Sub Total	6300.80							
	Total						**38.37**	6300.80	**241762.00**
6	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x150x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications **PWD SR 2021-22, Page No. 17, Item No. 6.33, Vol - II**	Sqm							
	Ganesha Temple Main Road, Badarappa Layout 2nd Cross E/S		2	95.00		0.40	76.00		
	Vepaate Residency Road, Balaji Layout		2	35.00		0.40	28.00		
	Issued Rate 07-07-2022 Basic rate	1067.00							
	Area weightage 10%	106.70							
	Sub Total	1173.70							
	Total						**104.00**	1173.70	**122065.00**

Sl No	Description of work	Unit	Mesurement				Qty.	Rate	Amount
			No.	L	B	D			
7	Providing and Fixing pre cast Covering Slab made out of CC 1:2:4 with **100 mm** thick and Finishing cutting, including form work,curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc, complete. (**Approved Data Rate**)	Sqm							
	Covering Slab								
	Sahaja Pride Apartment E/S Road 6th Cross Balaji Layout		2	135.00	0.90		243.00		
	Newton Public School N/S Road, Bhadrappa Layout		2	35.00	0.90		63.00		
	Newton Public School E/S Road, Bharadrappa Layout		2	80.00	0.90		144.00		
	Newton Public School Cross Road 2, Bhadrappa Layout		1	73.00	0.90		65.70		
	Vepaate Residency Road, Balaji Layout		2	36.00	0.90		64.80		
	6th Cross Balaji Layout Sham Charitable Clinic Road		1	115.00	1.20		138.00		
	Ganesha Temple Main Road, Badarappa Layout 2nd Cross E/S		1	100.00	0.90		90.00		
	Chowdeshwari Layout 2nd Main		1	130.00	0.90		117.00		
	Ganesha Temple Main Road, Badarappa Layout 2nd Cross Cross Roads		1	53.67	0.90		48.30		
	Data rate	2072.00							
	Total						**973.80**	2072.00	**2017714.00**
8	Providing and Fixing pre cast Covering Slab made out of CC 1:2:4 with **230 mm** thick and Finishing cutting, including form work,curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc, complete. (**Approved Data Rate**)	Sqm							
	Culvert Slab								
			3	7.00	1.20		25.20		
	Data rate	5037.00							
	Total						**25.20**	5037.00	**126932.00**
9	Providing granite slabs of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete **Page No. 27 / Item No. 5.31.1 PWD SR 2018-19**	Sqm							
	For Covering Slab								
	Sahaja Pride Apartment E/S Road 6th Cross Balaji Layout		1	82.00		0.90	73.80		
	Basic Rate	700.00							
	Area Weightage @ 6%	42.00							
	Total	**742.00**							
				82.00			**73.80**	742.00	**54760.00**
10	KSRB 5-9 : Providing chamfering edges to stone slab 2.5 cms. wide as per specifications. (only chamfered length shall be recorded) KBS 5.1.13 **Page No. 26 / Item No. 5.22, PWD SR 2018-19**	m							

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty.	Rate	Amount
			137	3.00			**410.00**	61.48	**25207.00**
	Basic Rate	58.00							
	Area Weightage @ 6%	3.48							
	Total	**61.48**							
11	Loading and Unloading of Stone Boulder / Stone aggregates / Sand / Kankar / Moorum. (Tipper 14 m3) **(PWD SR 2021-22 Vol-III Page No.3, Item No.1.1C)**	Cum							
	Qty Vide 90% of Item No- (1)						808.19		
	Basic rate	74.00							
	Area Weightage 10%	7.40							
	Total	81.40							
	Total						**808.19**	81.40	**65786.00**
12	Cost of Haulage Excluding Loading and Unloading Taking output 18 t load and lead 10 km = 180 t.km **(PWD SR 2021-22 Vol-III Page No.3, Item No.1.4B)**	T.Km							
	Qty frm Item No-10			808.19	1.28		1034.47		
	Total						**1034.47**	115.50	**119481.00**
	15Km 7*15	105.00							
	Area Weightage 10%	10.50							
	Total	115.50							
								Grand Total	**6354884.00**
								GST Charges (18% of Executed cost)	**1143879.00**
								Miscellenious and rounding off	**1237.00**
								Total Amount	**7500000.00**

Rupees Seventy Five Lakh(s) Only

CERTIFICATE:

1) The work spot has been inspected and found to be necessary.
2) The work spot comes under B.B.M.P Limits.
3) The provisions made in the estimate are necessary and minimum.
4) The estimate is based on C.S.R of PWD 2021-22, Issue rates and Data Rates.

Assistant Engineer
Ward No.12, Kodigehalli

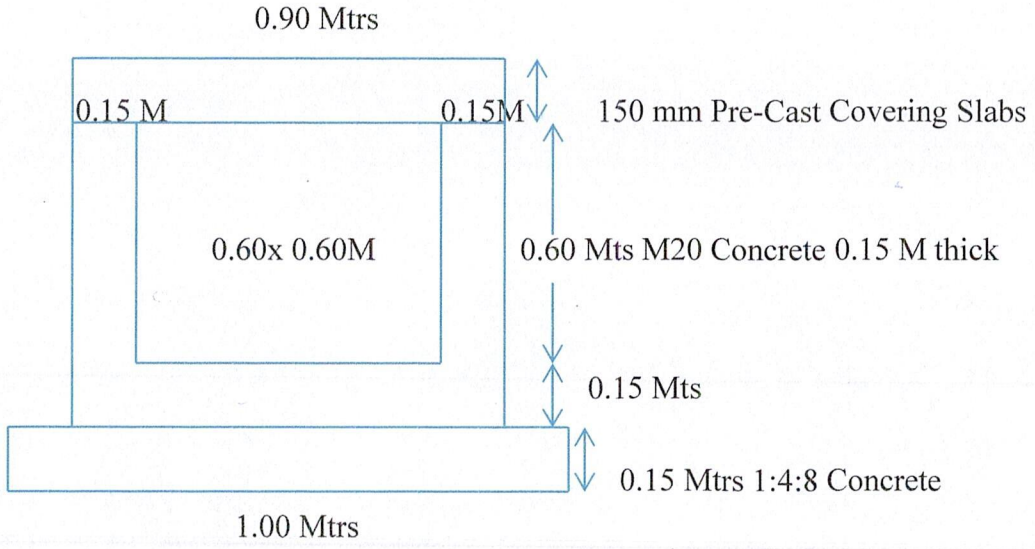
Assistant Executive Engineer
Kodigehalli Sub Division

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Executive Engineer
Byatarayanapura Division

ADMINISTRATIVE APPROVAL
Accorded For Rs. Rs. 75.00 Lakhs only
Head of A/c. P3726
Div. Ref No. 56 Date. 21/02/23
AE
EE(BTP)

Technical Sanction
Accorded For Rs.75.00 lakhs
Head of A/C. P3726
CER NO : 117 Dt: 16/02/23

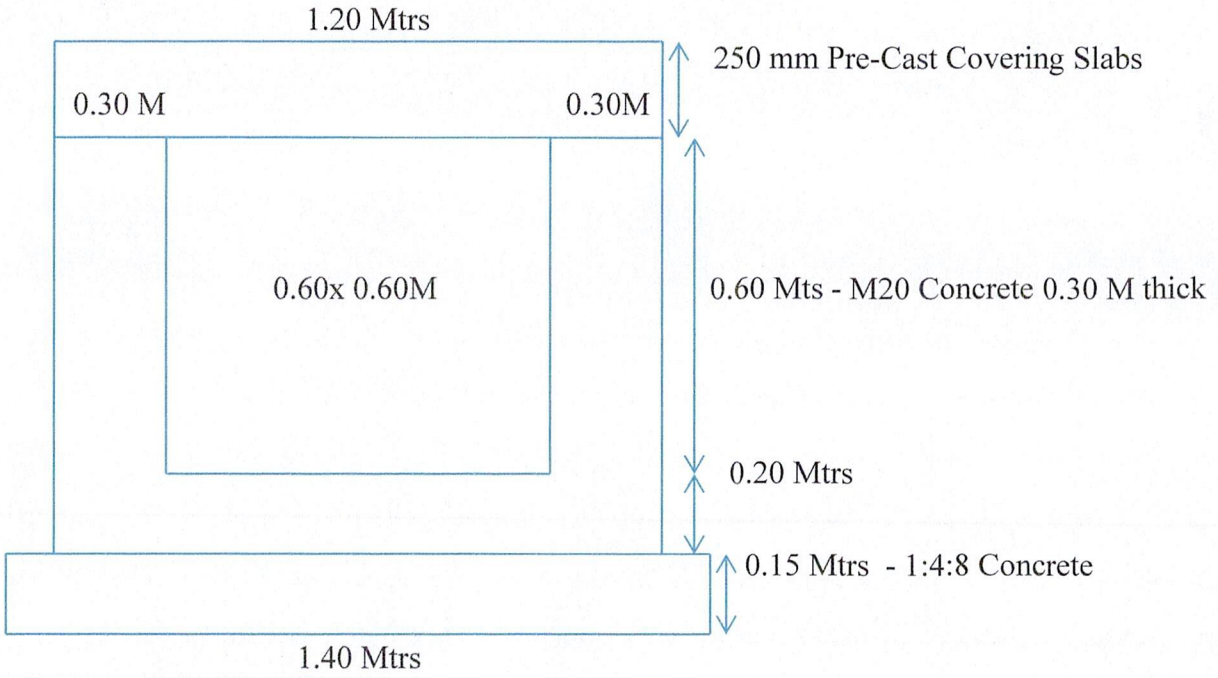


CROSS SECTION OF RCC DRAIN

Assistant Engineer

Assistant Executive Engineer

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore



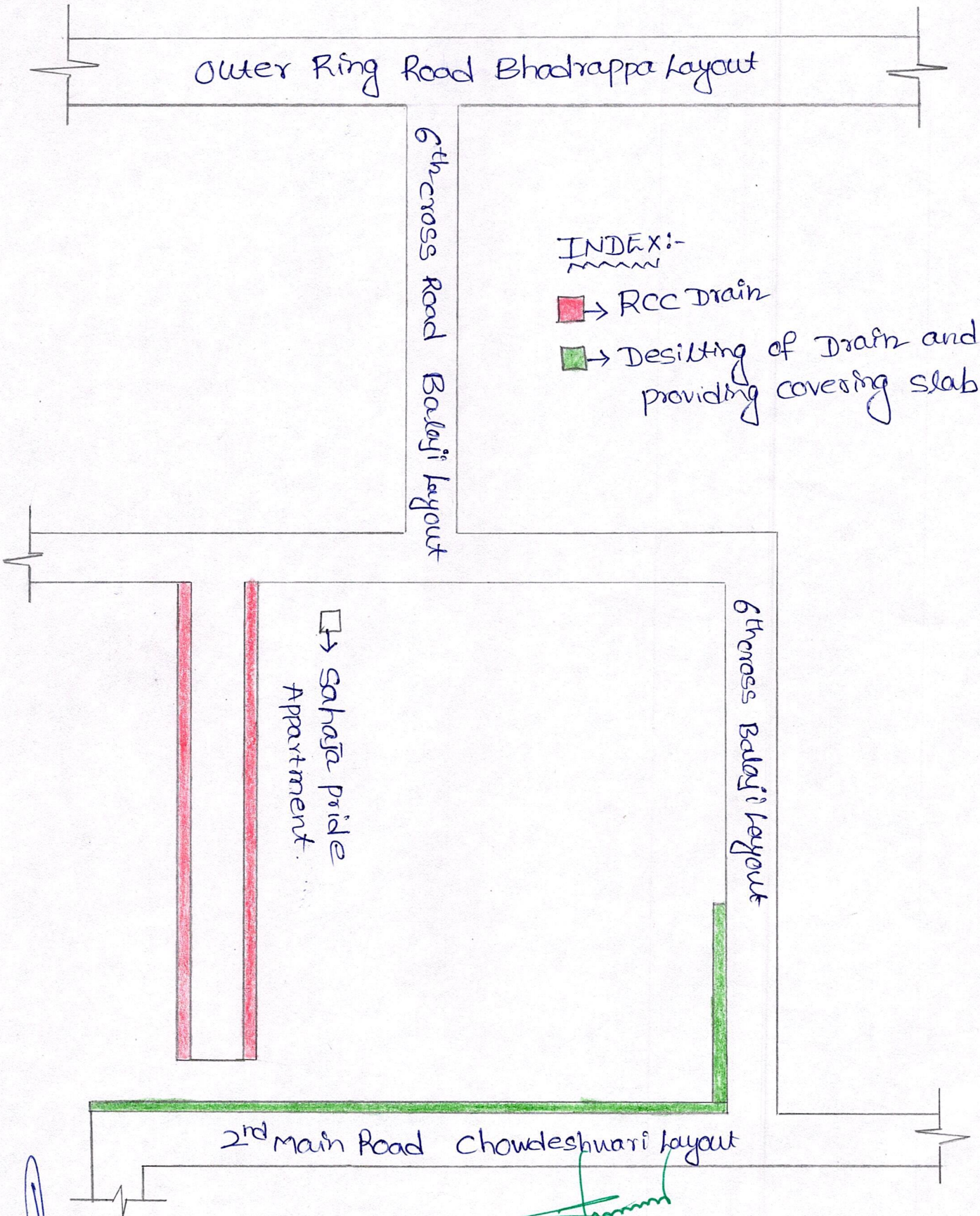
TIPICAL CROSS SECTION OF RCC CULVERT

Assistant Engineer

Assistant Executive Engineer

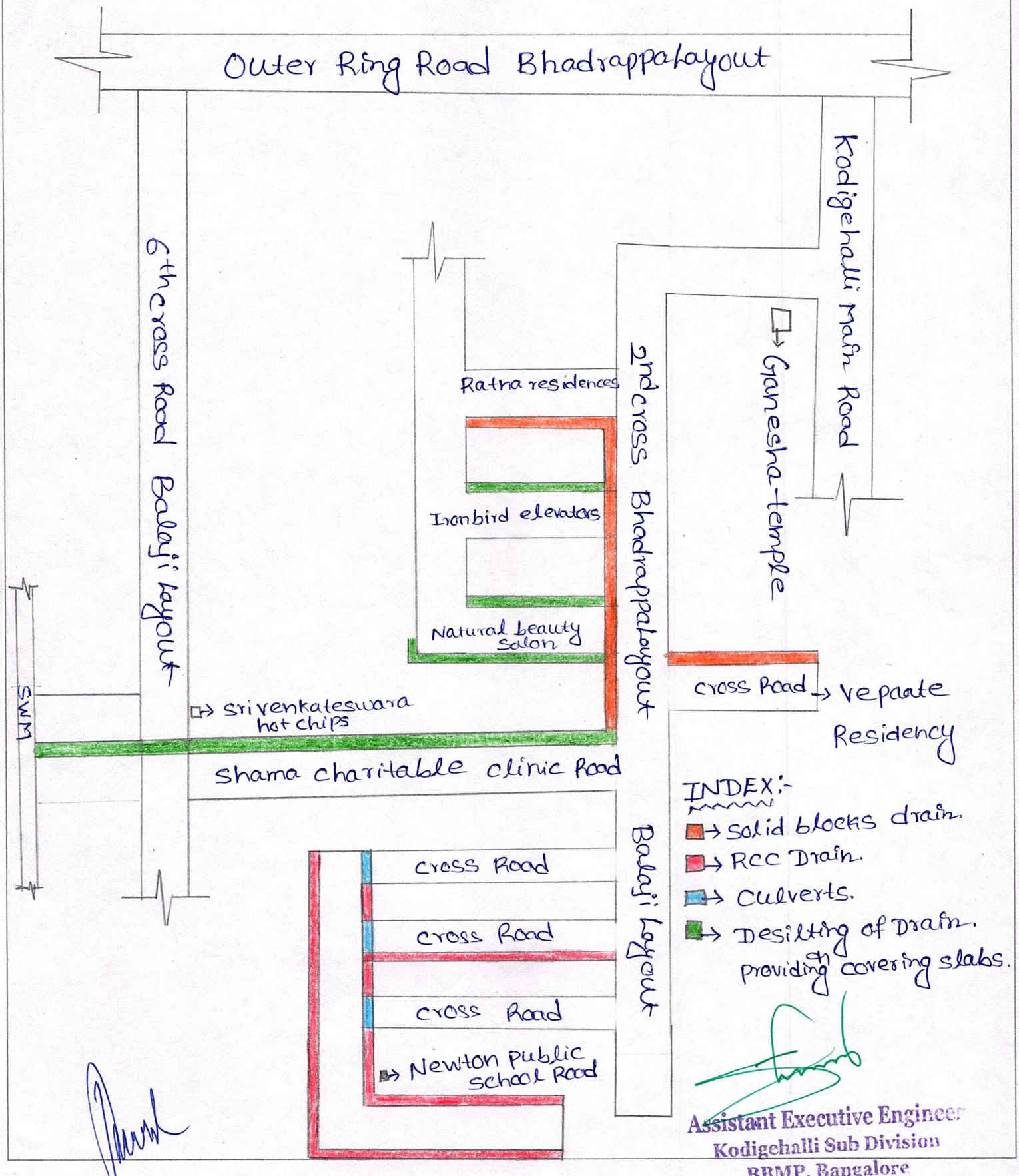
Assistant Executive Engineer
Kodigehalli Sub Division
BBMP Bangalore

Name Of Work : Improvements to Roads and Drains in Cross Roads of Bhadrappa Layout and Surrounding Areas in Ward No.12 – Kodigehalli.


Outer Ring Road Bhadrappa Layout
6th cross Road Balaji layout
INDEX:-
RCC Drain
Desilting of Drain and providing covering Slab
Sahaja Pride Apartment.
6th cross Balaji layout
2nd Main Road Chowdeshwari layout

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP Bangalore

Name Of Work : Improvements to Roads and Drains in Cross Roads of Bhadrappa Layout and Surrounding Areas in Ward No.12 – Kodigehalli.



Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore